

Form PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 039153-0451 (G1156)	SERIAL NO. Unknown
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		APPLICANT Lukanc et al.	
		FILING DATE Unknown	GROUP ART UNIT Unknown

 J1046 U.S. PTO
10/01/01

12/15/01

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	A1	09/772,527		Todd Lukanc			01/30/2001
DR	A2	6,228,539 B1	05/08/2001	Wang et al.	430	5	
	A3	5,858,580	01/12/1999	Wang et al.	430	5	
	A4	5,807,649	09/15/1998	Liebmann et al.	430	5	
	A5	5,573,890	11/12/1996	Spence	430	311	
		6,534,224	1/30/2001	LUKANC	430	5	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

A6	Levenson et al., "Improving Resolution in Photolithography with a Phase-Shifting Mask," IEEE Transactions On Electron Devices, Vol. ED-29, No. 12, December 1982, pp. 1828-36.
A7	Lin, B. J., "Phase-Shifting Masks Gain an Edge," Circuits & Devices, March 1993, pp. 28-35.

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.

Form PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 039153-0451 (G1156)		SERIAL NO. 10/016,441	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				APPLICANT Lukanc et al.			
				FILING DATE 12/11/2001		GROUP ART UNIT 1756	
U.S. PATENT DOCUMENTS							
INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
JR	A1	6,410,193	6/25/2002	Stivers et al.	430	5	RECEIVED JUN 05 2003 TC 1700
	A2	6,013,399	1/11/00	Nguyen	430	5	
	A3	5,861,233	1/19/99	Sekine et al.	430	296	
	A4	5,780,187	7/14/98	Pierrat	430	5	
	A5	5,641,593	6/24/97	Watanabe et al.	430	5	
	A6	5,619,059	4/8/97	Li et al.	257	431	
	A7	5,328,784	7/12/1994	Fukuda	430	5	
FOREIGN PATENT DOCUMENTS							
REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO	
A8	EP 0 708 367 B1	14-01-1998	European				
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
JR	A9	T. BRUNNER ET AL., "170 nm gates fabricated by phase-shift mask and top anti-reflector process," 182/SPIE Vol. 1927, Optical/Laser Microlithography VI, 1993, pps. 1-8.					
	A10	KURT RONSE ET AL., "Comparison of various phase shift strategies and application to 0.35 μ m ASIC Designs," 2/SPIE Vol. 1927, Optical/Laser Microlithography VI, 1993, pps. 1-15.					
	A11	J. M. CALVERT ET AL., "Projection X-Ray Lithography With Ultrathin Imaging Layers and Selective Electroless Metallization," Optical Engineering Vol. 32 No. 10, Oct. 1993., pp. 2437-2445					
	A12	H. KYURAGI ET AL., "Synchrotron Radiation-Excited Chemical Vapor Deposition of Silicon Nitride Films from a SiH ₄ + NH ₃ Gas Mixture," Journal of the Electrochemical Society, Vol. 138 No. 11, Nov. 1991, pp. 3412-3416.					
	A13	Y. MATSUI ET AL., "Low-Temperature Growth of SiO ₂ Thin Film by Photo-Induced Chemical Vapor Deposition Using Synchrotron Radiation," Japanese Journal of Applied Physics, Part I, Vol. 31 n.6B, June 1992, pp. 1972-1978.					
EXAMINER JR				DATE CONSIDERED 9/10/03			
* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.							

Form PTO-1449
(MODIFIED)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

039153-0451 (G1156)

SERIAL NO.

10/016,441

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

APPLICANT

Lukanc et al.

FILING DATE

12/11/2001

GROUP ART UNIT

1756

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

B14

J. F. MOORE ET AL., "Deposition of Dielectric Thin Films by Irradiation of Condensed Reactant Mixtures," Materials Research Society Symposium Proceedings, Vol. 335, 1994, pp. 81-86.

B15

I. NISHIYAMA ET AL., "Photon Energy Dependence of Synchrotron Radiation Induced Growth Suppression and Initiation in Al Chemical Vapor Deposition II. Surface Analysis by Auger Electron Spectroscopy," Applied Surface Science, Vol. 103, 1996, pp. 299-306

B16

O. R. WOOD II ET AL., "Use of Attenuated Phase Masks in Extreme Ultraviolet Lithography," Journal of Vacuum Science and Technology B, Vol. 15, No. 6, Nov/Dec 1997, pp. 2448-2451

B17

R. ZANONI ET AL., "Synchrotron-Radiation-Stimulated Tungsten Deposition on Silicon from W(CO)₆," Journal of Vacuum Science and Technology A, Vol. 9, No. 3, May/June 1991, pp. 931-934.

B18

CHEN HL ET AL., "Simulation on a New Reflection Type Attenuated Phase Shifting Mask for Extreme Ultraviolet Lithography", Emerging Lithographic Technologies III, Santa Clara, CA, USA, 15-17 March 1999, Vol. 3676, pages 578-586, XP002230586, Proceedings of the SPIE - The International Society for Optical Engineering, 1999, SPIE - Int. Soc. Opt. Eng., USA,

B19

U.S. Application Serial No. 09/772,577, entitled "PHASE SHIFT MASK AND SYSTEM AND METHOD FOR MAKING THE SAME" by Lukanc.